

The objections are noted and a Request for Drawing Changes is submitted herewith.

Rejection under 35 U.S.C. § 112, second paragraph

Claim 24 stands rejected hereunder as allegedly ambiguous with respect to whether a combination (segment, diaphragm, and shaft) or a subcombination (only the segment) is being claimed. This rejection is respectfully traversed.

As now amended, claim 24 requires that the bristles terminate along a radius of curvature, but that they do not lie along radii of the curvature. Thus, Applicants are claiming the segment only; the rotor and the labyrinth seal that can be formed therewith are recited functionally and do not form part of the claimed device. The alleged ambiguity is respectfully traversed because there is no reasoning why one of ordinary skill in the art, reading the claim in light of the specification, would not understand what is being claimed (*i.e.*, a combination or subcombination). That another structure, such as the rotor, is positively recited, does not necessarily make the claim ambiguous; Applicants are allowed to recite a device or structure with which the claimed device cooperates to particularly recite what Applicants regard as the claimed device without also claiming the structure cooperated with. (For example, a claim to a carburetor which recites connection of a fuel/air mixing chamber to an intake manifold of a combustion engine is still claiming the carburetor without also claiming the manifold, engine, or device in which the engine functions). Accordingly, withdrawal of this rejection is now requested.

Rejections under 35 U.S.C. § 102

As now claimed, the devices require a continuous ring of bristles. In contrast, the Skinner patent requires that the bristles be missing along at least a part of the ring circumference; note Fig. 6 and the area T without bristles (col. 6, ln. 32-34).

In addition, the claims directed to the segments *per se* (*e.g.*, claims 1-4) recite bores in opposing side faces of the segments for springs so that the combination of multiple segments for making a seal (with a continuous ring of bristles) is retractable (*e.g.*, as

described in the Brandon patent mentioned in the specification and cited in the communication). Skinner does not disclose this structure, and specifically teaches that brush seals cannot be provided in a labyrinth seal or a retractible ("movable radially") seal at the last paragraph of column five. Accordingly, this rejection should now be withdrawn.

#### Rejection under 35 U.S.C. § 103

Various claims stand rejected hereunder over the combination of Dalton and Noone, which rejection is respectfully traversed.

As now defined by the amended claims, all of the segments, and seals made therefrom, include segments that are retractable; that is, they are biased away from the shaft except during normal operating conditions, when they are biased towards the shaft to create a seal. This is not disclosed in either reference. Further, Dalton describes adjustable segments, whereas Noone describes a continuous ring. There is no teaching from either reference why they might be combined.

The mere existence in the art of a fact (*e.g.*, Noone's brush seal) is not sufficient to render obvious its use (*e.g.*, alleged addition to Dalton seal) absent some motivation in the cited art. *Northern Telecom, Inc. v. Datapoint Corp.*, 15 USPQ2d 1321, 1323 (Fed. Cir. 1990) ("it is insufficient that prior art shows similar components, unless it also contains some teaching, suggestion, or incentive for arriving at the claimed structure"); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988) ("it is impermissible to reconstruct the claimed invention from selected pieces of prior art absent some suggestion, teaching, or motivation in the prior art to do so"); *Interconnect Planning Corp. v. Feil*, 227 USPQ 543, 551 (Fed. Cir. 1985) ("it is insufficient to select from the prior art the separate components of the inventor's combination, using the blueprint supplied by the inventor"); *Fromsom v. Advance Offset Plate, Inc.*, 225 USPQ 26, 31 (Fed. Cir. 1985) ("the prior art must suggest to one of ordinary skill in the art the desirability of the claimed combination"). Accordingly, this rejection now should be withdrawn.



Various other claims stand rejected hereunder over a combination of Dalton, Noone, and Synfelt on the basis that Synfelt shows a spring biasing the seal segments. However, Applicants' claims recite the biasing means as causing the segment to move to a *larger* clearance position. To the contrary, Synfelt teaches that the spring "biases the segment for radial *inward* movement"; *i.e.*, to a *smaller* clearance position. Again, the combination teaches away from the claimed invention and this rejection should be withdrawn.

Still other claims stand rejected hereunder over a combination of Dalton, Noone, and Veau, which rejection is respectfully traversed. In addition to the aforementioned deficiencies in the combination of Noone and Dalton, it is suggested that the brushes described by Veau cannot be in the configuration of a ring because then they would not rotate or pivot in the diaphragm as taught and required by Veau. That is, if formed into a ring, the entire ring would have to rotate as taught by Veau, which would appear to be physically impossible. Thus, this rejection may now be withdrawn.

#### Double Patenting Rejection

As the claims are now amended, the present claims require retractable packing segments (*i.e.*, they move radially). Such is not claimed by the cited co-pending application, and accordingly the same invention is not being claimed in both applications, so this rejection may now be withdrawn.

The rejection for obviousness-type double patenting over Dalton '340 in view of Noone, and optionally Veau or Synfelt, is vigorously, yet respectfully, traversed, and clarification is requested. This type of rejection is believed to be proper only when relying on the disclosure of the patent (Dalton) over which the rejection is made; not its claims, and not other references. Further, the Dalton '340 patent does not appear to provide any disclosure more pertinent to brush seals or the claimed invention than the Dalton '549 patent used in the rejections under §102 and §103. Accordingly, to that

extent, these rejections over the combination of Dalton, Noone, and Veau or Synfelt have been addressed above.

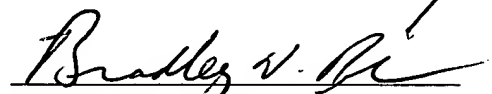
### Conclusion

In view of the foregoing, withdrawal of all of the rejections, and further and favorable action, in the form of a Notice of Allowance, are believed to be next in order, and such actions are earnestly solicited.

### Petition for Extension of Time

Pursuant to the provisions of 37 CFR 1.136(a), Applicants hereby petition for a one month extension of time to 30 July 1999 in order to respond to the Office Action mailed 30 March 1999. A check in the amount of \$ 110.00 is attached. If this paper should necessitate any fees under 37 C.F.R. § 1.16 or § 1.17 not provided, or if there has been an overpayment, please debit or credit as necessary the firm's Deposit Account No. 08-2776.

Respectfully submitted,



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### **CERTIFICATE OF MAILING OR TRANSMISSION — 37 CFR 1.8**

I hereby certify that I have a reasonable basis that this paper, along with any referred to above, (i) are being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231, or (ii) are being transmitted to the U.S. Patent & Trademark Office in accordance with 37 CFR § 1.6(d).

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SIGNATURE: Brad Ruben

26 July 1999



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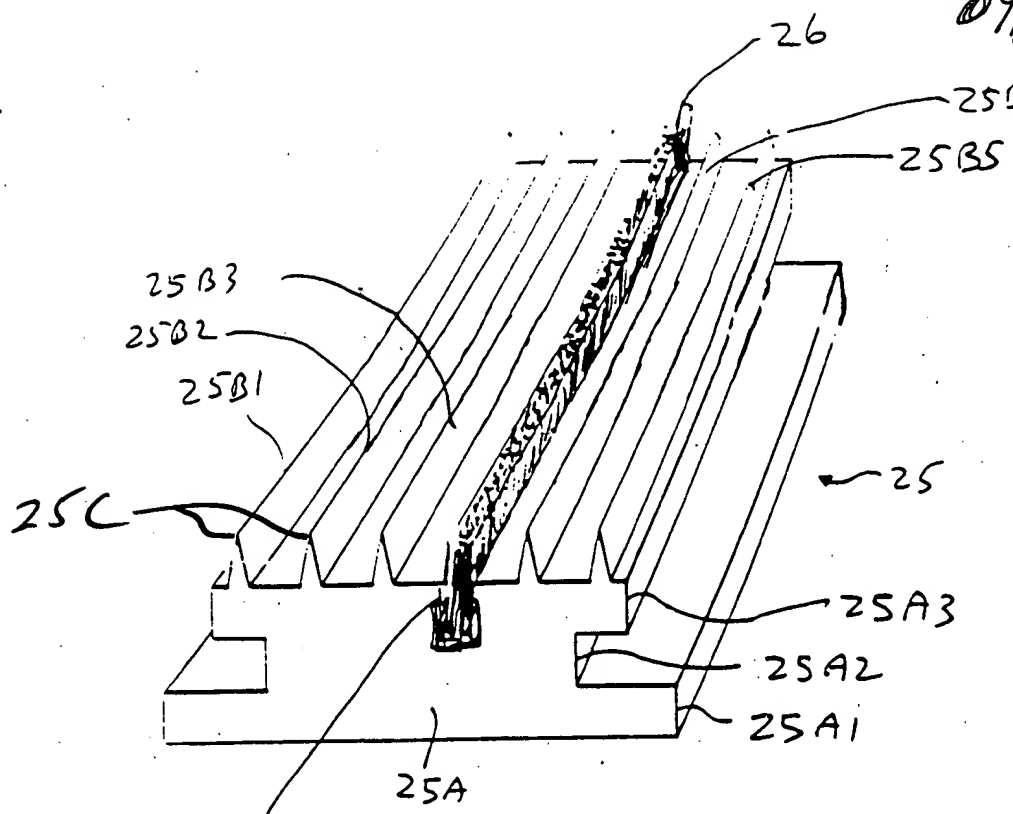
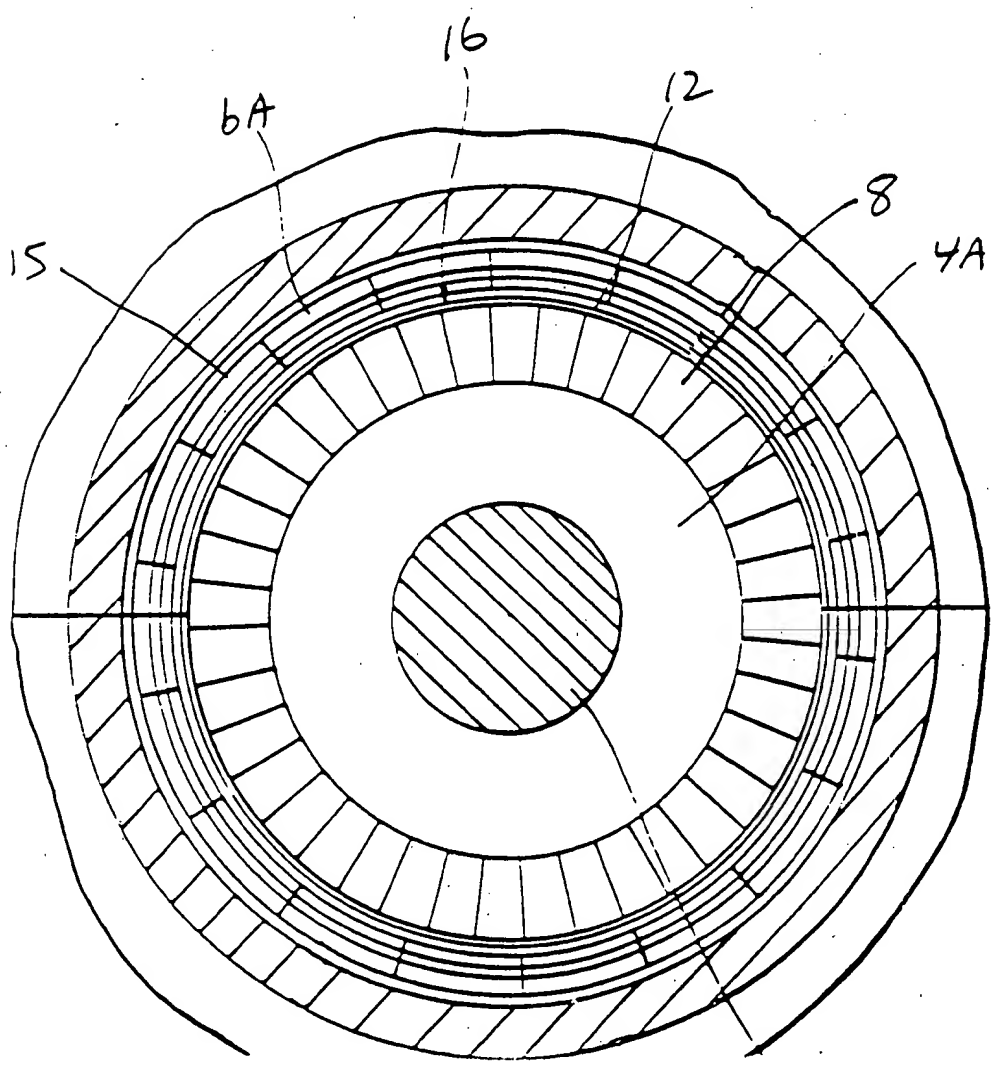


FIG. 6



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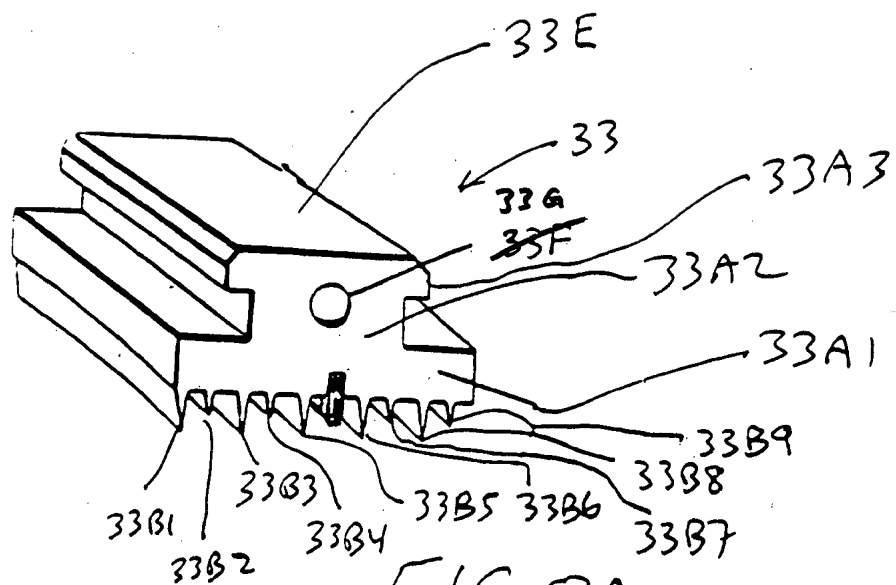


FIG. 8A